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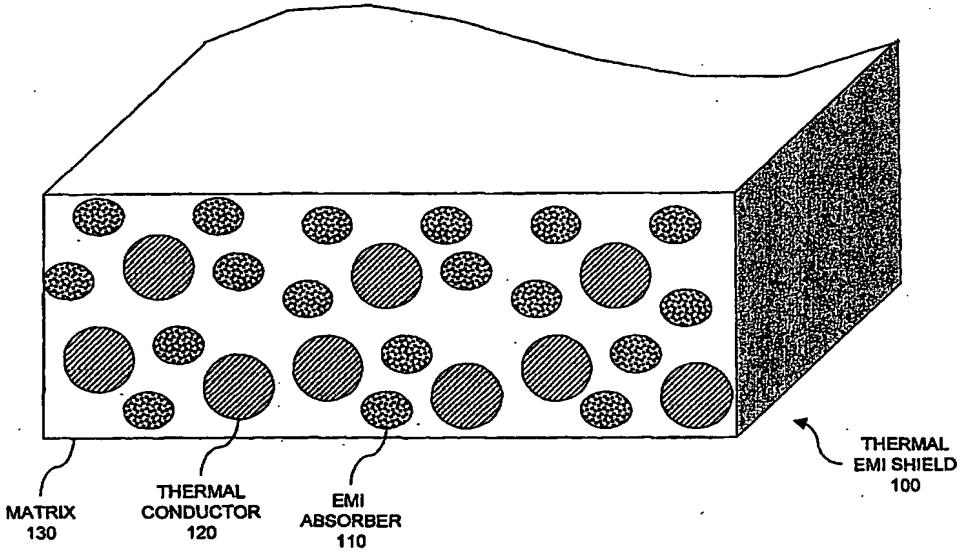
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## (54) Title: THERMALLY CONDUCTIVE EMI SHIELD



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(57) Abstract: Electromagnetic-energy absorbing materials are combined with thermally conductive materials, such as those used for thermal management in association with electronic equipment, thereby suppressing the transmission of electromagnetic interference (EMI) therethrough. Disclosed are materials and processes for combining EMI-absorbing materials with thermally conductive materials thereby improving EMI shielding effectiveness in an economically efficient manner. In one embodiment, a thermally conductive EMI absorber is prepared by combining an EMI-absorbing material (for example, ferrite particles) with a thermally conducting material (for example, ceramic particles), each suspended within an elastomeric matrix (for example, silicone). In application, a layer of thermally conductive EMI-absorbing material is applied between an electronic device or component, and a heat sink

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/33353

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B05D 5/12; B32B 9/00  
 US CL : 427/128, 126.2; 174/135R; 428/323, 325, 334, 421, 423.1, 446, 457, 469, 492, 474.2, 411.1, 500, 688  
 According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 427/128, 126.2; 174/135R; 428/323, 325, 334, 421, 423.1, 446, 457, 469, 492, 474.4, 411.1, 500, 688, 480, 484

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,632,942 A (YEH et al.) 27 May 1997 (27.05.1997), abstract and examples	1-21, 27-28
---		22-26, 29-31
X	US 5,827,997 A (CHUNG et al.) 27 October 1998 (27.10.1998), abstract and columns 3-4.	1-13, 16, 19-21
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